

Claims

- [c1] 1. A bicycle crank and pedal assembly comprising:
a crank arm that has a cavity for a rotating plate as well as a track for a device to move back and forth along the length of the crank arm;
a device that moves on a track in the crank arm and has a pedal spindle fixed to it at one end; and
a subassembly in which a plate and a pedal are fixed to the opposite ends of a plate shaft.
- [c2] 2. The crank and pedal assembly of Claim 1, wherein a plate shaft and a pedal spindle are inserted into a crank arm, the shaft and spindle are coaxial, and the shaft or the spindle has a cylindrical hole for the other to pass through.
- [c3] 3. The crank and pedal assembly of Claim 1, wherein a plate, a plate cavity, the foot and gravity are used to control the effective length of a crank arm in a pre-scribed manner.